# **NISTTech**

# Methods & Electrolyte Compositions for Electrodepositing Metal-Carbon Alloys

### **Abstract**

Methods for electrodepositing a metal-carbon coating on a substrate comprising immersing the substrate in an aqueous electrolyte, and passing a sufficient current through the electrolyte to effect electrolyte deposition of a metal-carbon alloy on the substrate. The aqueous electrolyte comprises from about 0.2 to about 0.6 mol/l of metal ions selected from the group consisting of iron, nickel, nickel-tungsten mixture and cobalt-tungsten mixture, greater than about 1.4 mol/l of an amidosulfonic acid or a salt thereof, ammonium ions, formic acid or a salt thereof, and water.

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## **Related Items**

 See also continuation expired U.S. Patent # 5,759,243. Methods and electrolyte compositions for electrodepositing metal-carbon alloys

## References

Expired U.S. Patent # 5,672,262

• Docket: 95-023D

# **Status of Availability**

This technology is available in the public domain.

Last Modified: 10/22/2010